REMARKS

Applicants would like to thank the Examiner for the telephone interview on March 24, 2005, during which the reference cited in the Office Action was discussed.

This is in response to the Office Action mailed March 2, 2005. Claims 1-16 were pending. Claims 1-5, 7, 9, 11-13 have been amended. Claims 1-16 remain pending.

Claims 1, 3, 4, and 9 had been objected to. Claims 1-16 had been rejected under 35 USC 102(e). In view of the amendments and the arguments presented herein, Applicants respectfully request reconsideration, removal of all objections and of all claim rejections for any pending claims, and allowance of those same pending claims.

Claims 1-5, 7, 9, 11-13 have been amended to address the objections and generally to clarify the claims.

Claims 1-16 had been rejected under 102(e) as being anticipated by U.S. Patent 6,643,795 to Sicola et al ("Sicola"). In order for such a rejection to be warranted, all of the elements of Applicants' claims must be present in the prior art reference. Here, as is pointed out below, all of the elements are not disclosed by the cited prior art reference, so Applicants respectfully submit that the rejection should be removed and the pending claims allowed.

All of the independent claims have been amended to recite the interface including two sets of data and control/management interfaces. This is supported in the specification at least at page 18 lines 7-8.

Applicants claim a network adapter capable of being used to interface to a network environment a data storage system input/output (I/O) controller, the data storage system I/O

controller residing in a first network data storage system, the network environment being external to the network data storage system, the network adapter comprising:

an interface capable of being used to couple the network adapter to the data storage system I/O controller via a backplane in the first data storage system, the interface comprising two sets of data and control/management interfaces;

a switching system capable of being coupled to data exchanging devices in the network environment, the switching system being coupled to the data storage system I/O controller when the one or more interfaces couple the network adapter to the data storage system I/O controller; and

port circuitry capable of being used to facilitate establishment of a link between the first network data storage system and a second network data storage system in the network environment, the second network data storage system being remote from the first network data storage system, the link, when established, facilitating establishment of a target device in the second network data storage system as a data mirroring device capable of comprising a mirror of data residing in a source device in the first network data storage system (Claim 1).

Applicants also claim a circuit card configured to be inserted into and received by a circuit card slot in a first network data storage system, the circuit card comprising:

an interface capable of being coupled via signal transmission system of the first network data storage system to an input/output (I/O) controller of the first network data storage system when the circuit card is inserted into the circuit card slot, the interface comprising two sets of data and control/management interfaces;

a switch that may be coupled to data exchanging devices external to the circuit card and the first network data storage system, and that may be coupled to the I/O controller when the circuit card is inserted into the circuit card slot; and

port circuitry that may be used to facilitate establishment of a link between the first network data storage system and a second network data storage system, the link, when established, facilitating data transmission from a source device to a target device, the source device being in the first network data storage system, the target device being in the second network data storage system and being used to mirror data residing in the source device (Claim 4).

Applicants also claim a method of using a network adapter that may be used to interface to a network environment a data storage system input/output (I/O) controller, the data storage system (I/O) controller residing in a first network data storage system, the network environment being external to the first network data storage system, the network adapter including an interface, a switching system, and port circuitry, the method comprising:

coupling the interface to the data storage system (I/O) controller via a backplane in the first network data storage system, the interface comprising two sets of data and control/management interfaces;

coupling the switching system to data exchanging devices in the network environment, the switching system being coupled to the data storage system (I/O) controller when the interface couples the adapter to the data storage system (I/O) controller; and

using the port circuitry to facilitate establishment of a link between the first network data storage system and a second network data storage system in the network environment, the

second network data storage system being remote from the first network data storage system, the link, when established, facilitating establishment of a target device in the second network data storage system as a data mirroring device that may comprise a mirror of data residing in a source device in the first network data storage system (Claim 9).

Applicants also claim a method of using a circuit card configured to be inserted into and received by a circuit card slot in a first network data storage system, the circuit card including an interface, a switch, and port circuitry, the method comprising:

coupling the interface via signal transmission system of the first network data storage system to an input/output (I/O) controller of the first network data storage system when the circuit card is inserted into the circuit card slot, the interface comprising two sets of data and control/management interfaces;

coupling the switch to data exchanging devices external to the circuit card and the first network data storage system, and the switch also being coupled to the I/O controller when the circuit card is inserted into the circuit card slot; and

using the port circuitry to facilitate establishment of a link between the first network data storage system and a second network data storage system, the link, when established, facilitating data transmission from a source device to a target device, the source device being in the first network data storage system, the target device being in the second network data storage system and being used to mirror data residing in the source device (Claim 12).

The respective dependent claims inherit all of the limitations of independent claims 1, 4, 9, and 12.

Sicola discloses data replication system having a redundant configuration including dual Fiber Channel fabric links interconnecting each of the components of two data storage sites, wherein each site comprises a host computer and associated data storage array, with redundant array controllers and adapters, but does not disclose all of the elements of Applicants' claims.

As amended, all of Applicants' claims require an interface capable of being used to couple a network adapter to a data storage system I/O controller via a backplane in a data storage system, wherein the interface includes two sets of data and control/management interfaces.

Sicola does not disclose an interface capable of being used to couple a network adapter to a data storage system I/O controller via a backplane in a first data storage system, and Sicola certainly does not disclose or suggest the interface including two sets of data and control/management interfaces as required by all of the claims.

Sicola is a high level description that does not describe the details of components at the level of Applicant's interface. In addition, Sicola includes no language that would suggest such an interface having even one set of data and control/management interfaces, much less two sets as required by all of the claims.

For at least this reason, Sicola does not disclose all of the elements of Applicants' claims.

Since the dependent claims include all of the limitations of the independent claims from which they are respectively dependent, the dependent claims are patentable for at least the same reasons that the independent claims are patentable.

In view of the foregoing, the Applicants believe that the application is in condition for allowance and respectfully request favorable reconsideration and allowance of Claims 1-16.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (508) 293-7074.

Please charge all fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

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